

WE CLAIM:

1. A non-aqueous ink formulation comprising a polyisoprene derivative.
- 5 2. The ink formulation of Claim 1 wherein the derivative has a weight average molecular weight between 10,000 and 40,000.
3. The ink formulation of Claim 2 wherein the derivative has a weight average molecular weight between 10,000 and 30,000.
- 10 4. The ink formulation of Claim 1 also containing one or more pigments and a high boiling petroleum.
- 15 5. The ink formulation of Claim 1 wherein the ink formulation is selected from the group consisting of heatset offset ink formulations, sheet-fed ink formulations and UV curable ink formulations.
6. The ink formulation of Claim 1 wherein the derivative is selected from the group consisting of degraded and built-up derivatives.
- 20 7. An additive for an ink formulation comprising a polyisoprene derivative and a solvent.
8. The additive of Claim 7 wherein the solvent is high boiling petroleum.
- 25 9. The additive of Claim 7 wherein the polyisoprene derivative has a weight average molecular weight between 10,000 and 40,000.
- 30 10. The additive of Claim 7 wherein the additive was selected from the group consisting of degraded and built-up derivatives.

11. A non-aqueous ink formulation comprising a polyisoprene derivative wherein the derivative makes up between 1 to 10% by weight of the ink formulation.

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12. The formulation of Claim 11 wherein the derivative has a weight average molecular weight between 10,000 and 40,000.

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13. A method of providing rheological properties to a non-aqueous ink formulation comprising:

- a. preparing a non-aqueous ink formulation and
- b. dispersing into such formulation a polyisoprene derivative.

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14. The method of Claim 13 wherein the polyisoprene derivative has a weight average molecular weight between 10,000 and 40,000.